POCKET REFERENCE

VisiCalc®

FOR THE ATARI 800™ 32K PERSONAL COMPUTER

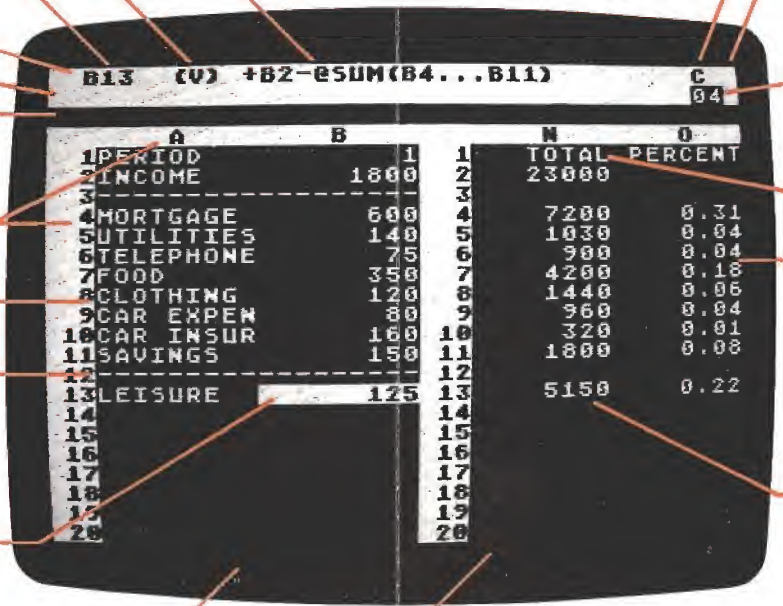
Program Created and Written by
Software Arts, Inc.

VisiCorp™

Exclusive Distributor

40910-3312 1/83

A VisiCalc® Screen



Entry Contents

Entry Type:
(V) = Value
(L) = Label
(/ –) = Repeating Label

Current cursor coordinate

Entry Line

Prompt Line

Edit Line:
Light block is edit cue

Row and Column Labels

Label

Repeating Label (/ –)

Cursor

Screen split into two vertical windows

Recalculation Order Indicator
R = across rows
C = across columns

! indicates sheet is being recalculated

Memory Indicator:
Number of K memory available. M indicates out of room.

Right-Aligned Format (/FR)

Dollars-and-cents Format (/F$)

Integer Format (/FI)

USE OF KEYS

MOVING THE CURSOR

→ ← ↑ ↓	Move the cursor in designated direction. Used in value entry and some commands to point to an entry position that will be selected when RETURN or a colon is pressed.
;	Moves cursor between windows (see /W).
>coord	Go To Command. Cursor moves to designated coordinate

CALCULATING

+	Addition
–	Subtraction
*	Multiplication
/	Division
^	Exponentiation
#	If the coordinate is immediately to left of edit cue, replaces coordinate with that location's current value. Otherwise places current value of cursor location on edit line.
!	When the edit line is clear, forces recalculation of entire sheet. When formula is on the edit line, replaces formula on edit line with its current value.

EDITING

BACK S	Deletes character to left of edit cue on edit line. If edit cue is at beginning of edit line, cancels command entry and clears prompt line.
BREAK	Cancels command, clearing edit line and prompt line; stops printing or disk storage operation in progress.

LABELS

Start with any letter or ". The initial quotation mark does not appear on the edit line. Defines the entry as a label with the numeric value of zero. Labels are left-aligned in the entry position. Correct typing errors while entering with BACK S.

VALUES

Start with a digit (0 through 9), plus (+), minus (–), open parenthesis, period (.), number sign (#), or at sign (@). In General format, program shifts between conventional and scientific notation as required to display the calculated value to the greatest precision. If column is too narrow to display the number in scientific notation, greater-than signs (>) fill the entry position.

VALUE REFERENCES

Entry position coordinate used as element in a formula. Value references are allowed wherever numbers are allowed. To start a value entry with a value reference, begin with +.

FILE NAMES

A file name consists of up to 8 characters and must begin with a letter. It can include letters or numbers. No other characters are allowed. Suffixes are automatically added by the program to differentiate files: .VC for VisiCalc files, .PRF for print files, and .DIF for DIF files.

File name prefixes can also be added:

- Dn: designates the disk drive where n is the number of the drive.
- C: sends to a cassette.
- Rn: sends to RS-232 devices. Can be followed by the baud rate (300, 1200, etc.).
- P: sends to printers. /SSP: prints out formulas and formats.

A file name can be given in the VisiCalc program by:

- Typing the entire file name for the file.
- Scrolling the name from the current directory with the →.
- Typing a drive designator (e.g., "D2:") and pressing RETURN, then scrolling file names with the →.
- Typing a file name with wild cards and scrolling through the names containing the given characters. * replaces any number of characters in a file name. ? replaces only one character in a file name.

A file name may be edited before pressing RETURN by:

- Using the BACK S key to delete single characters.
- Typing additional characters to add to the name.

FUNCTIONS

Provide common formulas for use in values. Each function begins with @ followed by the name of the function; most functions also require an expression in parentheses (the argument). An argument includes the values (formulas and numbers) upon which the function calculates.

The arguments may be:

v	Any valid VisiCalc value.
list	Any combination of values and ranges separated by commas.
range	A portion of a row or column specified by its beginning coordinate, a period (displayed as an ellipsis), and its final coordinate.
@ABS(*v*)	Absolute value of *v*.
@AVERAGE (*list*)	Average of the non-blank entries in *list*. Maximum of 255 entries in *list*.
@COUNT(*list*)	Number of non-blank entries in *list*. Maximum of 255 entries in *list*.
@EXP(*v*)	Natural exponential of *v*.
@INT(*v*)	Integer portion of *v*.
@LN(*v*)	Natural logarithm of *v*.
@LOG10(*v*)	Base 10 logarithm of *v*.
@LOOKUP (*v,range*)	Compares *v* to the successive values in *range* and returns the corresponding value from the column or row immediately to the right or below the entries in *range*.
@MAX(*list*)	Maximum value in list.
@MIN(*list*)	Minimum value in list.
@NPV (*dr,range*)	Net present value of the cash flow in *range*, discounted at the rate specified in the expression *dr* (discount rate).
@SQRT(*v*)	Square root of *v*.
@SUM(*list*)	Sum of the values in *list*.

TRIGONOMETRIC FUNCTIONS

All angles are in radians.

@ACOS(*v*)	Arccosine of *v*.
@ASIN(*v*)	Arcsine of *v*.
@ATAN(*v*)	Arctangent of *v*.
@COS(*v*)	Cosine of *v*.
@SIN(*v*)	Sine of *v*.
@TAN(*v*)	Tangent of *v*.

FUNCTIONS WITHOUT ARGUMENTS

@ERROR	Makes all expressions referencing the value display ERROR.
@NA	Makes all expressions referencing the value display NA.
@PI	3.1415926536.

/B	Blank	Erases the highlighted entry position. RETURN or arrow key completes command.
/C	Clear	Clears the worksheet, restores the General format and single window. Y completes command, any other key cancels.
/D	Delete	Deletes the entire row (/DR) or column (/DC) on which the cursor rests.
/F	Format	Sets local format for the highlighted entry position but does not affect contents in memory. Remains until changed or the worksheet is cleared.
	/FD	Default—Resets to the global format.
	/FG	General—Maximum precision.
	/FI	Integer.
	/FL	Left-aligned.
	/FR	Right-aligned
	/F$	Dollars-and-cents (two decimal places).
	/F*	Graph—Replaces value with asterisks equal to its integer value.
/G	Global	Affects entire window or sheet.
	/GC	Column—Sets column width of all columns to specified number (3 to 37). RETURN completes command.
	/GF	Format—Sets display format for all columns not specifically formatted. See /F for format specifications.
	/GO	Order of Recalculation—Specifies whether the worksheet is to be recalculated down the columns (/GOC) or across the rows (/GOR).
	/GR	Recalculation priority—Sets recalculation to automatic (/GRA) or manual (/GRM). Typing ! causes recalculation.
/I	Insert	Inserts a new blank row (/IR) or column (/IC) at the cursor position.

/M	Move	Moves an entire row or column to another position on the sheet. The first coordinate on the edit line designates the row or column to be moved. The final coordinate specifies where the row or column is to be moved. RETURN completes command.
/P		See "Printing."
/R		See "Replicating."
/S		See "Storing."
/T	Titles	Fixes rows and columns in place on the screen so they remain in view when the window is scrolled. The position of the cursor determines which column(s) and/or row(s) to be fixed. The Go To command (>) moves the cursor into a fixed area.
	/TH	Horizontal—Fixes rows at and above the cursor.
	/TV	Vertical—Fixes columns at and to the left of the cursor.
	/TB	Both—Fixes columns and rows.
	/TN	None—Unfixes all rows and columns.
/V	Version	Displays the copyright notice and version number.
/W	Window	Splits the screen vertically or horizontally at the current cursor position. The semicolon (;) moves the cursor from one window to the other. Global commands affect only the window containing the cursor.
	/WH	Horizontal—Splits the screen just above the row with the cursor.
	/WV	Vertical—Splits the screen just to the left of the column with the cursor.
	/WS	Synchronized scrolling—Split windows scroll together.
	/WU	Unsynchronized scrolling—Cancels synchronized scrolling.
/–	Repeating Label	Fills the entry position with the designated character(s).

The Print command sends a contiguous rectangular portion of the worksheet to a printer or to diskette. Formulas are not sent (to print formulas and formats, see /SS).

To print all or part of a VisiCalc sheet:

1. Place the cursor on the upper-left coordinate of the rectangular area to be printed and type /P.
2. Type F to send to diskette file. Type P to send to a printer.
3. Type + to send a carriage return. Type – to turn off the line feed automatically sent by the VisiCalc program. Type & to restore the line feed.
4. To send setup strings, type ", the strings, then RETURN. The setup strings must be reentered each time the Print command is used. Invalid setup strings sent to the printer give no error indication.
5. Enter lower-right coordinate of the rectangle to be printed, either by typing it or pointing the cursor to it, and press RETURN.

REPLICATING

The Replicate command copies the entry contents of the source range (the position(s) to be copied) into the target range (the position(s) to which it will be copied.)

A range is a portion of a row or column specified by its beginning coordinate, a period (shown as ...), and its final coordinate.

A colon separates the source range from the target range and is entered by typing either colon or RETURN.

	Source	Target
To copy one entry once	coordinate	: coordinate
To copy one entry several times	coordinate	: range in one row or column
To copy a row or column once	row or column range	: starting coordinate
To copy a row several times	row range	: range in one column
To copy a column several times	column range	: range in one row

RETURN completes command.

If the source range includes reference to other locations, indicate how each reference is to be treated:

N	No Change	Copies the reference as it appears in the source entry.
R	Relative	Changes the reference so that it is relative to the target position.

STORING

The Storage command writes a file to diskette, reads a saved file from diskette, writes and reads files in the DIF™ format, deletes files from a diskette, initializes diskettes, and quits the VisiCalc program. File names can be displayed from the diskette by pressing the right arrow key when prompted for the file name.

/SL	Load	Reads a file previously saved with /SS. The file is loaded over the current sheet. New entries replace old ones. Any entries that are not replaced remain the same. To load a file into an empty worksheet, clear with /C before loading new file.
/SS	Save	Saves the information on the worksheet on diskette under the specified file name. Type /SSP: to print formulas and formats.
/SD	Delete file	Deletes the specified file from the diskette.
/SI	Initialize diskettes	Initializes storage diskettes completely erasing anything already on the diskette.
/SQ	Quit	Quits the VisiCalc program, returning to the operating system.
/S#S		Writes the specified area of worksheet to diskette as a file in the DIF™ format. R or RETURN saves by rows, C saves by columns.
/S#L		Loads a file in the DIF™ format. R or RETURN loads the information by rows, C loads by columns.

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